

**STATE OF MAINE**

**DEPARTMENT OF MARINE RESOURCES**

<b>IN THE MATTER OF THE APPLICATION OF</b>	)	
<b>INTERNATIONAL AQUA FOODS USA, INC. FOR AN</b>	)	<b>FINDINGS OF FACT,</b>
<b>AQUACULTURE LEASE LOCATED IN EASTERN</b>	)	<b>CONCLUSIONS OF</b>
<b>LAW</b>		
<b>JOHNSON BAY, LUBEC, WASHINGTON COUNTY,</b>	)	<b>AND DECISION</b>
<b>MAINE</b>	)	

On November 4, 2003 International Aqua Foods USA, Inc. of Eastport, Maine applied for an aquaculture lease totaling 32.14 acres in the coastal waters of the State of Maine, located in Eastern Johnson Bay in Lubec, Washington County, Maine. The applicant requested the lease for a term of ten (10) years for the purpose of cultivating Atlantic salmon (*Salmo salar*) and Atlantic cod (*Gadus morhua*) using net pen culture techniques. The application was accepted as complete on March 19, 2004. A public hearing on this application was held on May 18, 2004 at 6:00 p.m., in Lubec.

Approval of aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner of the Department of Marine Resources (DMR) if it is determined that the project will not unreasonably interfere with the ingress and egress of riparian owners; navigation; fishing or other uses of the area, taking into consideration the number and density of aquaculture leases; significant wildlife habitat and marine habitat or the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna; or the use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site and that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site.

**Evidence Introduced Concerning the Nature**  
**and Impact of the Proposed Lease**

The evidentiary record before the Department regarding this lease application includes the Department file (Exhibit 1), including the application (Exhibit 2) and the Department site report (Exhibit 3), and the record of the May 18, 2004 public hearing. At the public hearing, testimony was given by the applicant's representative Mark Kesselring, the Department's Aquaculture Environmental Coordinator, Jon Lewis, and Robert Gardner, First Selectman for the Town of Lubec.

According to the application and the testimony by Mr. Kesselring, the proposed aquaculture lease is sought to raise Atlantic salmon and Atlantic cod. The applicant requested a lease site totaling 32.14 acres and a lease term of ten (10) years. Mr. Kesselring testified that the application proposes to expand upon an existing lease site. The existing lease site, DESC LU, is 10 acres and contains eight 70-meter circular cages. The proposed expanded site of 32.14 acres would encompass the existing 10-acre lease site and would contain ten 100-meter circular cages. According to Mr. Kesselring, the expanded site would provide improved efficiencies in fish health and containment. Mr. Kesselring testified that this application is part of a larger restructuring by the applicant that will result in fewer leases held and fewer acres leased by the applicant. Mr. Kesselring acknowledged that the proposed lease site is within 2,000 feet of an existing lease site, SFML JB3, held by the applicant. He stated that the applicant would surrender that site if granted the proposed lease.

According to the application, smolts from one of the applicant's hatcheries would be placed on the lease site in accordance with Industry Bay Management Agreements, approximately every 24 months. Daily access to the site would be from the Lubec Marina. Currently, one trip per week is made from Eastport for feed delivery to the on-site feed storage scow. However, according to the application, the applicant intends to change feed practices on the lease site. Feed would be directly loaded onto feeding vessels at the Lubec facilities prior to

the first daily departure, and therefore an on-site feed storage scow would no longer be required. According to the application, feed operations would be performed by blowers mounted on 2 lobster boat-type vessels instead of the current practice of using 2 small feed blowers mounted on small scows. The feeding practices used by the applicant are intended to minimize food conversion ratios, feed usage and wasting of feed. According to the application, the applicant would maintain numerous records in order to maintain good fish health. Projected production at the proposed lease site would consist of stocking 350,000 fish on the site. The present number of fish stocked at DESC LU is 154,000 and 180,000 at SFML JB3, and thus the lease activities at the proposed lease site would result in a slight increase of fish produced in the lease area. According to the application, all power equipment used on the site, such as work boats, a work barge and feed blowers, would be equipped with mufflers. Any lights used on the proposed lease site, other than for navigation, would be subsurface husbandry lighting. Mr. Kesselring testified that the current lease activities do not result in an unreasonable impact from noise or light and that the proposed lease activities would be the same in terms of noise and light impacts.

In accordance with Department regulations, Chapter 2.10(3), the applicant provided an environmental baseline of the proposed lease area. According to the baseline field survey submitted with the application, benthic sampling for infauna; sediment samples for granulometry; hydrographic measurements for current speed and direction; profiles of temperature, salinity, dissolved oxygen and depths; and an underwater video recording were performed at the proposed lease site. The fieldwork took place on September 13 and 21, 2003.

The diver survey and underwater video recording was performed along two 360-meter dive transect lines. Fauna observed in the recording include scallops, urchins, crabs, sea cucumbers, shrimp, and sea stars. The observed sea floor consisted of gravel, sand and cobble on the eastern end and soft sand and silt on the western end. The current data collected over a 22-day period indicated a mean current velocity of 12.5 cm/sec. and a maximum current velocity of 67 cm/sec. Profiles of temperature, salinity and dissolved oxygen were collected at

the proposed site at depths ranging from 0.8 to 18.4 meters below surface. The temperature ranged from 11.6-13.0°C; salinity ranged from 32.1-32.6 ppt surface to bottom; and dissolved oxygen ranged from 99-119.3 % saturation. Mr. Kesselring testified that monitoring data from the existing lease site has demonstrated that aquaculture operations can occur in the proposed location without significant environmental impact, as no organic buildup has been noted under the present farm operations.

According to the application, the proposed lease site is not used by riparian owners for access. Mr. Kesselring testified that the present operations at the lease site have not led to any impairment of riparian access. Thus, according to the applicant, ingress and egress of riparian owners would not be adversely affected. According to Mr. Kesselring, the proposed lease site is located approximately 534 feet from the Lubec town landing. This is the same distance as the current lease site, as the proposed expansion is in the direction away from the landing. Thus, according to the applicant, the proposal to move to the north and west should not unreasonably interfere with the use of the docking facility. Mr. Kesselring also testified that the proposed lease activities would not interfere with navigation, as there would be approximately 1,200 feet of navigable water to the northeast of the site and 2,000 feet of navigable water to the northwest.

According to the application, the proposed lease area is currently used by up to 20 commercial fishing vessels transiting to and from fishing grounds. Mr. Kesselring testified that the proposed lease site is used for commercial fishing. However, he stated that the surrender of 19.94-acre lease SMFL JB3 would free that area for commercial fishing, resulting in no net loss of viable fishing ground. The Cobscook Bay Fishermen's Association submitted a letter to the Department stating that the association supports the proposed lease expansion.

The Department's Aquaculture Environmental Coordinator (AEC) and his assistant conducted a site visit at the proposed lease area on April 1, 2004. During the site visit, a diver survey, utilizing an underwater video camera, was performed. The AEC testified that the Department has video footage of the existing lease area that was obtained under the Finfish Aquaculture Monitoring Program. Therefore, the video obtained during the April 1<sup>st</sup> site visit was

taken in the expansion area of the proposed lease site. The AEC created a site report summarizing the information obtained during the site visit and provided testimony regarding the site report at the public hearing.

According to the report and the AEC's testimony, the proposed site is located just offshore of Lubec village, in water depths of approximately 42.8 feet at mean low water. The bottom topography of the proposed lease site is relatively flat and is comprised of sand and rock on the east side of the lease area, transitioning to mud and silt on the west side. Local fauna observed at the proposed lease site include an abundance of green sea urchins, sea scallops, and sea cucumbers; a common occurrence of hermit crabs, common sea stars and waved whelk; and an occasional spiny sun star, purple sun star, red-cockle, burrowing anemone, green crab, and sponge. Very little vegetation was observed at the proposed lease site. According to the AEC's report, currents are tidally driven in a southwest/southeast direction and are of sufficient speed for flushing and dispersal of farm waste. The AEC testified that the current lease operations are well run and have operated in a highly acceptable manner with no organic buildup. Additionally, according to the AEC, the water quality surrounding the existing lease site has been acceptable. The AEC testified that the applicant is required to obtain a Maine Pollutant Discharge Elimination System Permit from the Maine Department of Environmental Protection, which would require monitoring of future operations. Additionally, according to the AEC's report, the proposed lease area is not located within an Essential or Significant Habitat.

According to the AEC, a mooring field was observed in a cove to the southeast of the proposed lease site during the site visit. The AEC testified that the proposed lease site is located approximately 534 feet from the nearest point of land in Lubec and 450 feet from the end of the pier at the town landing. The closest corner of the proposed lease site to the pier and moorings is the same as that of the current lease site. According to the AEC, the proposed expansion to the north and the west would not have any additional impact on access to the moorings and pier. Additionally, according to the AEC, the proposed activities will not interfere with navigation in the area. The proposed lease site is located approximately 1,200 feet from

Dudley Island to the northeast and 2,000 feet from Rogers Island to the northwest, thus there is sufficient room in which to navigate around the lease site.

According to the AEC's report, no commercial or recreational fishing was observed within the boundaries of the proposed lease site during the site visit. However, according to the report, scallops and urchins were frequently observed during the site visit, as well as drag marks. The AEC testified that the scallops and urchins in the area of the proposed lease were of sub-legal size, indicating that the legal sized animals had been harvested. There are 7 aquaculture lease sites located within 1 nautical mile of the proposed site. Aside from SFML JB3, all sites are located at least 2,000 feet from the proposed site.

First Selectman for the Town of Lubec, Robert Gardner, testified in support of the proposed activities. He stated that he has not received any complaints regarding the present lease operations and that the applicant is doing a terrific job.

### **Findings of Fact**

The proposed aquaculture lease is an expansion of an existing lease site located in Eastern Johnson Bay. The lease site is located approximately 534 feet from the nearest point of land in Lubec, in water depths of approximately 42.8 feet at mean low water. There is a mooring field located in a cove, southeast of the lease site. The proposed lease site shares the southeast corner of the existing site and expands the site to the north and west. There have been no reported problems with accessing the shore or moorings near the existing lease operations. Navigation in the immediate area of the lease consists of commercial fishing vessels transiting to and from fishing grounds. There is 1,200 feet of navigable water northeast of the lease site and 2,000 feet of navigable waters to the northwest. Thus, there is sufficient water surrounding the proposed lease site for vessel traffic. Based on this evidence, I find that the lease will not unreasonably interfere with navigation or the ingress and egress of riparian owners.

Fishing in the area of the proposed lease site consists of commercial fishing for urchins and scallops. The applicant will be required to terminate a 19.94-acre aquaculture lease located

within 2,000 feet of the proposed lease site. Termination of that lease will open that area to commercial fishing. The Cobscook Bay Fishermen's Association supports the applicant's proposed lease expansion. There are 6 other aquaculture lease sites located within 1 nautical mile of the proposed site, all at least 2,000 feet from the proposed site. I find that the proposed lease will not unreasonably interfere with fishing or other uses of the area.

Existing fauna observed at the proposed site consists of green sea urchins, sea scallops, sea cucumbers, hermit crabs, common sea stars, waved whelk, spiny sun star, purple sun star, red-cockle, burrowing anemone, green crab, and sponge. The proposed lease site is not located within an Essential Wildlife Habitat. The mean current velocity at the proposed lease site is 12.5 cm/sec. and the maximum current velocity is 67 cm/sec. Currents are tidally driven in a southwest/southeast direction and, as demonstrated through the Finfish Aquaculture Monitoring Program, are of sufficient speed for flushing and dispersal of farm waste. The monitoring of the existing lease site has shown that the environmental conditions at the current lease site are acceptable. The projected production at the proposed lease site of 350,000 fish would be a slight increase of fish produced in the lease area, taking the termination of lease site SFML JB3 into consideration. Based on this evidence, I find that the proposed activities will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna.

All juvenile salmon and cod will be obtained from the applicant's hatcheries located in Maine and New Brunswick. Based on this evidence, I find that there is an available source of Atlantic salmon and Atlantic cod.

The proposed lease site is located approximately 450 feet from the end of the pier at the Lubec town landing. The existing aquaculture lease operations have not interfered with access to or use of the town landing. The proposed lease expansion is to the north and west of the existing lease, away from the landing. Based on this evidence, I find that the proposed lease site activities will not unreasonably interfere with public use or enjoyment within 1,000 feet of any municipally, state, or federally owned beaches, parks, or docking facilities.

The power equipment used on the proposed site, such as work boats, a work barge and feed blowers, would be similar to those used on the current lease site and would be equipped with mufflers. Any lights used on the proposed lease site, other than for navigation, would be subsurface husbandry lighting. I find that the proposed lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site

### **Conclusions of Law**

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner;
2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation;
3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area;
4. The aquaculture activities proposed for this site will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna;
5. The applicant has demonstrated that there is an available source of Atlantic salmon and Atlantic cod;
6. The aquaculture activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities; and
7. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise or lights at the boundaries of the lease site.

Accordingly, the evidence in the record supports a finding that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072.

### **Decision**

Based on the foregoing, the Commissioner grants the applicant's requested aquaculture lease of 32.14 acres from the date of this decision for the purpose of cultivating Atlantic salmon



(*Salmo salar*) and Atlantic cod (*Gadus morhua*) using net pen culture techniques. The applicant shall pay the State of Maine rent in the amount of \$50.00 per acre per year. The applicant shall post a bond or establish an escrow in the amount of \$25,000 conditioned upon their performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

### **Conditions to be Imposed on Lease**

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities. Conditions are designed to encourage the greatest multiple, compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the aquaculture law.

The following conditions are placed on this lease:

- (1) Navigation and recreational boating and fishing shall be allowed in the open areas of the lease;
- (2) the lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources regulations Chapter 2.80;
- (3) prior to conducting any activity on the lease site, the leaseholder shall terminate aquaculture lease SFML JB3; and
- (4) prior to conducting any activity on the lease site, the leaseholder shall obtain a Maine Pollutant Discharge Elimination System Permit from the Maine Department of Environmental Protection.

The Commissioner may commence revocation procedures if he determines that substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law are not being observed, the Commissioner may revoke the aquaculture lease.

**Dated:** \_\_\_\_\_

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**George D. Lapointe (Commissioner)**  
**Department of Marine Resources**